

ATTACHMENT DEVICES AND METHODS FOR A DENTAL APPLIANCE

ABSTRACT OF THE DISCLOSURE

The present invention provides improved systems and methods for removably attaching a dental positioning appliance to the dental features of a patient during orthodontic treatment. Such removable dental positioning appliances are often preferred over conventional braces for tooth repositioning due to comfort, appearance and ease of use. These appliances function by applying force to specific surfaces of the teeth or dental features to cause directed movement. However, the type of movement and level of force applied is usually dependent on the surface characteristics and positions of the dental features. In many cases, these aspects are inadequate to provide sufficient anchoring or to impart considerable force on the teeth to be repositioned. Such limitations may be diminished with the use of one or more attachment devices which may be positioned on the teeth or dental features to provide the appropriate physical features. Specific design and location of these attachment devices may provide newly achievable and/or more effective repositioning forces, anchoring ability and appliance retention. The systems and methods of the present invention provide the design, production and use of such attachment devices with removable dental positioning appliances in orthodontic treatment.

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